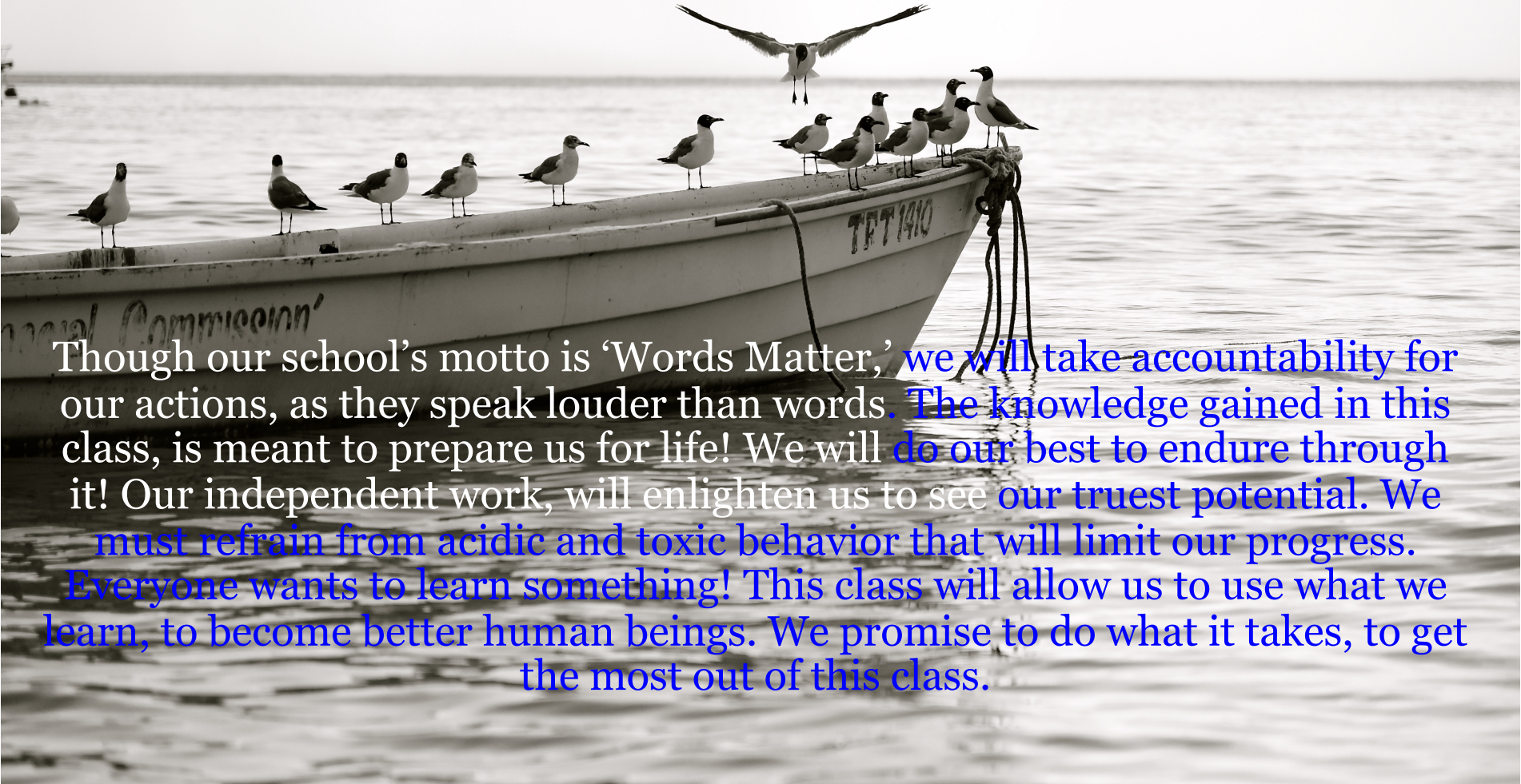


US HEALTH CORE COVENANT

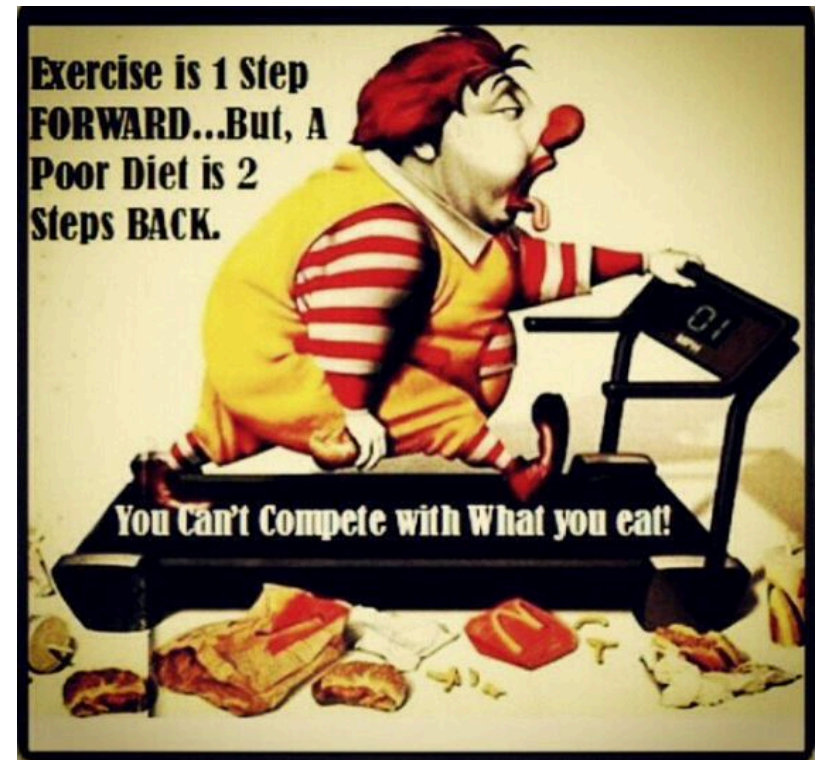
In Mr. Berment's US Health class, students are expected to treat others with respect and the way they want to be treated. Presumably, we will practice effective time management and be responsible for our own work. We will create efficient systems that will allow us to maintain our self-identity and refrain from bandwagonism.



Though our school's motto is 'Words Matter,' we will take accountability for our actions, as they speak louder than words. The knowledge gained in this class, is meant to prepare us for life! We will do our best to endure through it! Our independent work, will enlighten us to see our truest potential. We must refrain from acidic and toxic behavior that will limit our progress. Everyone wants to learn something! This class will allow us to use what we learn, to become better human beings. We promise to do what it takes, to get the most out of this class.

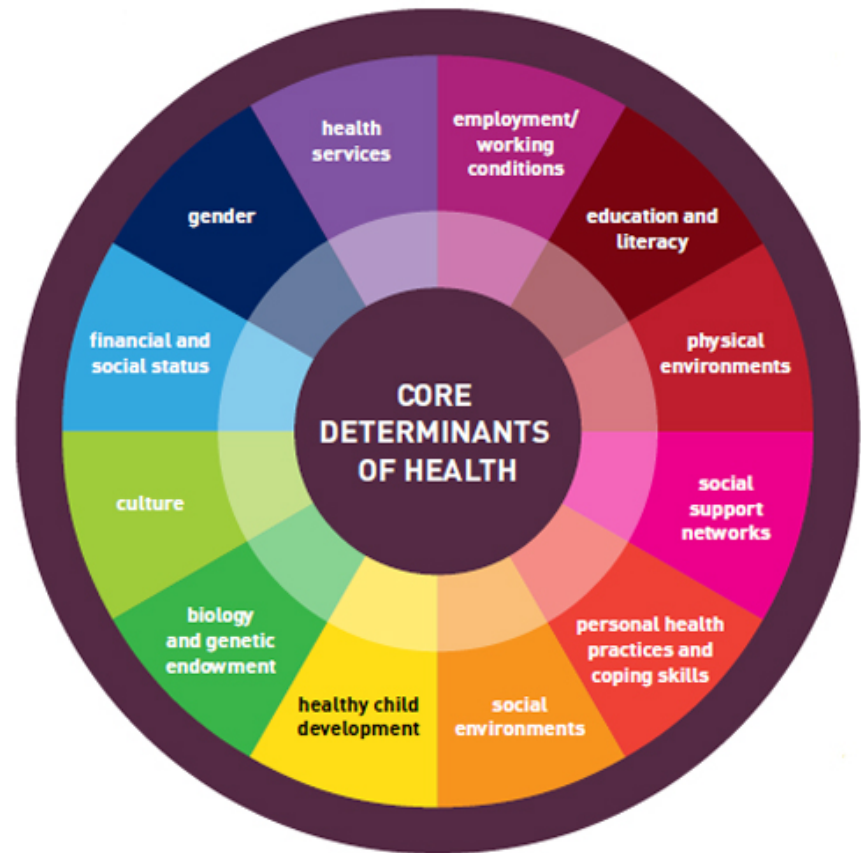
Mr. Berment's US HEALTH – UNIT 1

NUTRITION & EXERCISE



Key Factors Affecting Your Health?

- SLEEP
- NUTRITION/DIET
- EXERCISE
- HELP
- STRESS
- LOVE FOR ONESELF
- LOVE FOR OTHERS



<https://ahealthynewzealand2014.wordpress.com/2014/07/29/what-affects-your-health/>

Key Factors Affecting Your Health?

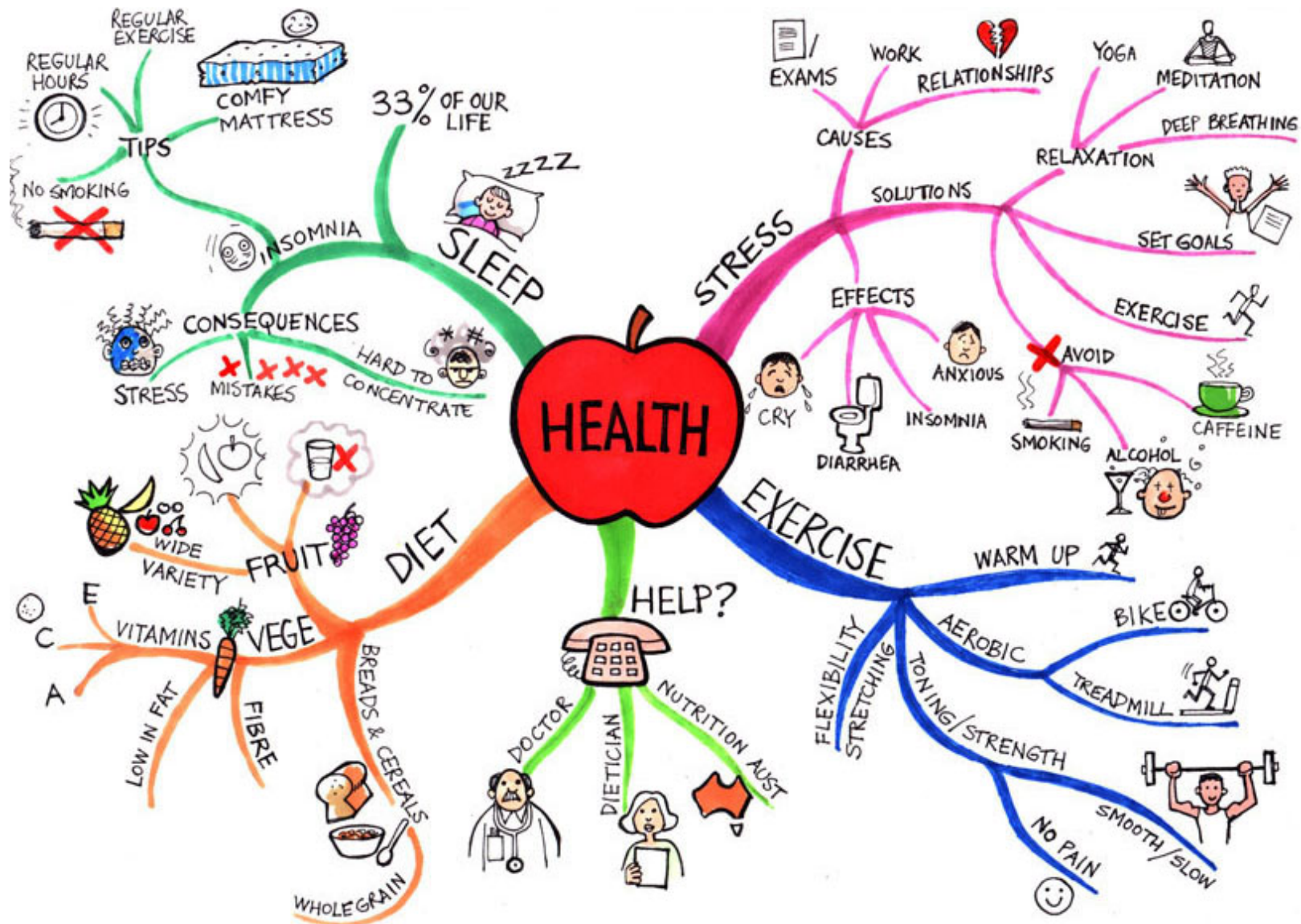
(Eowyn's prompt!) – Good question!

- Historically, health has always been perceived through the lens of medicine and biology, however the recent transition to the new public health has become explicitly concerned with the social, cultural, and economic elements of our lives which have the ability to determine the likelihood of us becoming ill or not. There are in fact many, many factors, that influence our health on a day-to-day basis.

HEALTH MAP

- If you had to create a health map? What would it look like?
- What would be on it?
- Draw a map of your health, using the key factors.

HEALTH MAP



OUR FOCUS IN THIS CHAPTER

- **NUTRITION –**

- The study of food at work in our bodies, our source for energy, and the medium for which our nutrients can function. Think of nutrition as the building blocks of life.
- <http://whatisnutritiontips.com/>

- **EXERCISE –**

- Exercise is also known as physical activity. In simple terms exercise is any movement that works your body at a greater intensity than your usual level of daily activity. Exercise raises your heart rate and works your muscles and is most commonly undertaken to achieve the aim of physical fitness.

WHY IS **NUTRITION** IMPORTANT?

<http://www.tuftsmedicarepreferred.org/healthy-living/expert-knowledge/importance-good-nutrition>

- Most people know good nutrition and physical activity can help maintain a healthy weight. But the benefits of good nutrition go beyond weight. Good nutrition can help:
- Reduce the risk of some diseases, including heart disease, diabetes, stroke, some cancers, and osteoporosis
- Reduce high blood pressure
- Lower high cholesterol
- Improve your well-being
- Improve your ability to fight off illness
- Improve your ability to recover from illness or injury
- Increase your energy level

NUTRITION

- LET US TEST YOUR NUTRITION IQ!

FIVE FOOD GROUPS

What are the five food groups?

- Grains
- Vegetables
- Fruits
- Protein
- Dairy



FIVE FOOD GROUPS

Vegetables (pick 2)

lettuce

broccoli

corn

potatoes

carrots

peas



Protein (pick 1)

beans

eggs

beef

ham

nuts

seeds



Fruits (pick 1)

apples

bananas

pears

berries

melons

peaches



Grains (pick 2)

bread

cereal

oatmeal

rice

tortillas

pasta



Dairy (pick 1)

milk

cheese

yogurt




FIVE FOOD GROUPS

Name _____ Date _____

My Health is My Responsibility


5 Food Group Tracking Placemat

Vegetable




- 5 Fresh Vegetables / Salad
- 4 Frozen Vegetables, Sweet Potatoes
- 3 Canned Vegetables
- 2 White Potatoes
- 0 Avoid French Fries/Tators

Fruit




- 5 Fresh Fruit
- 4 Packaged / Dried Fruit
- 3 Canned Fruit
- 2 Fruit Juice
- 0 Avoid Fruit Pop/Pie

Dairy




- 5 Fat Free Milk, Yogurt, Cheese
- 4 1% Milk, Yogurt, Cheese
- 3 2% Milk, Yogurt, Cheese
- 0 Avoid Full Fat Products

Grain



- 5 Whole Grain Breads, Tortillas, Crackers
- 5 Brown Rice, Corn/Peas, Whole Wheat Pasta
- 2 White Pasta, White Rice, White Tortilla
- 0 Avoid White Bread, Cookies, Cakes

Protein



- 5 Baked / Broiled Fish, Turkey/Chicken, Eggs
- 3 Beans, Nuts, Seeds, Nut Butters
- 2 Beef, Ground Beef, Ham
- 0 Avoid Corn Dogs and Hot Dogs

Stars

- 5 Gold - 5 stars
- 4 Green - 4 stars
- 3 Blue - 3 Stars
- 2 Red - 2 Stars
- 0 Grey - 0 Stars
- Total

Instructions: On the back of this placemat, you will find areas to record how many of each food group you eat each day. You can place up to 3 stars in each area. You can color in the stars using non-toxic, washable crayons or non-toxic, washable markers. Use the guide shown here to see what colors your stars should be.

EXERCISE

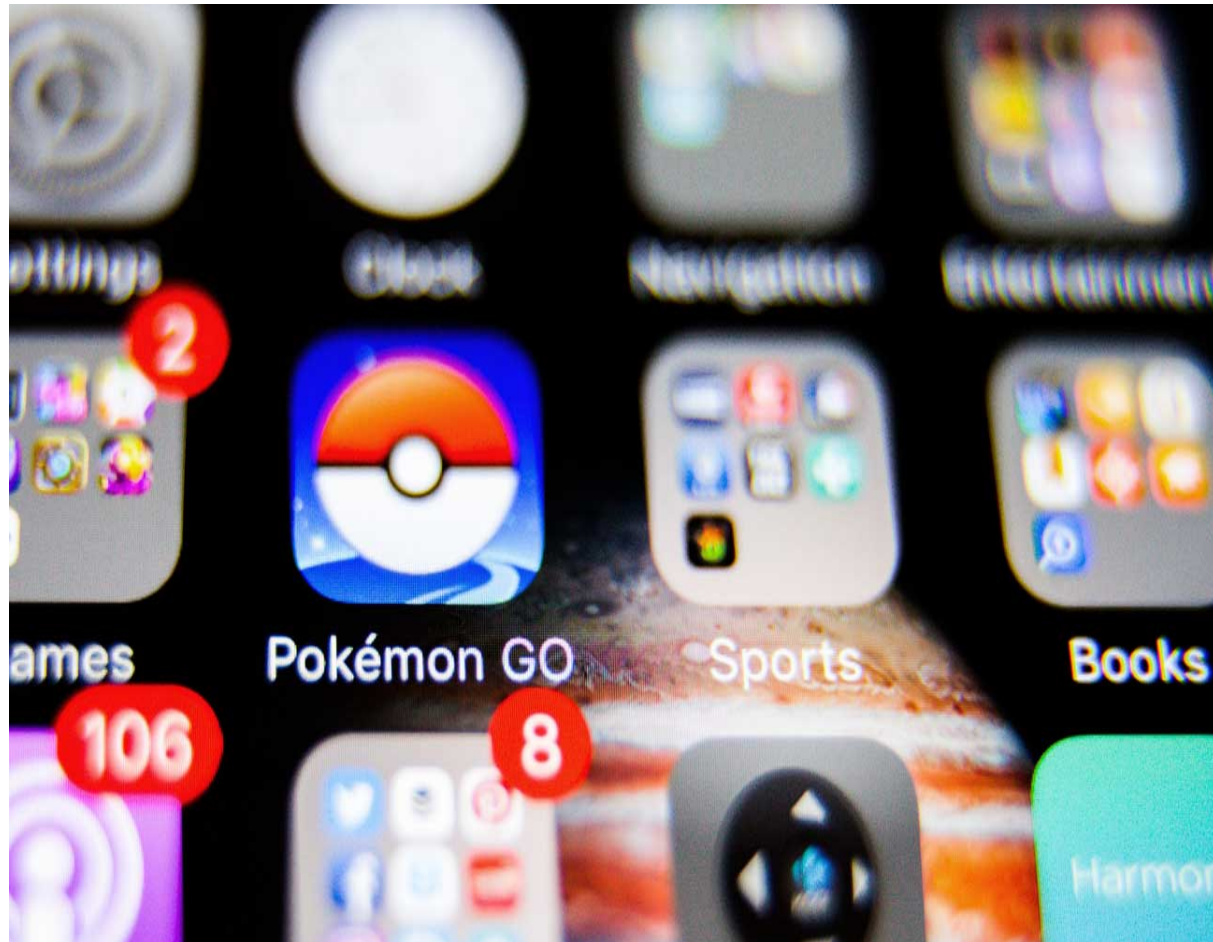


WHY IS **EXERCISE** IMPORTANT?

- Exercise is important to ensure that your body is strong and healthy enough meet the challenges that you set for it.
- Exercise has a multitude of positive effects on your body, including:
- Improved heart and lung efficiency, reducing your chances of developing heart disease.
- Increased metabolic function, enabling you to maintain a healthy weight.
- Strong joints and muscles, so you can meet the demands of daily life.
- Maintenance of posture and flexibility, to keep you walking tall.
- Production of endorphins in your brain, promoting a sense of well being.
- There is also research emerging that indicates that exercise can increase brain function.

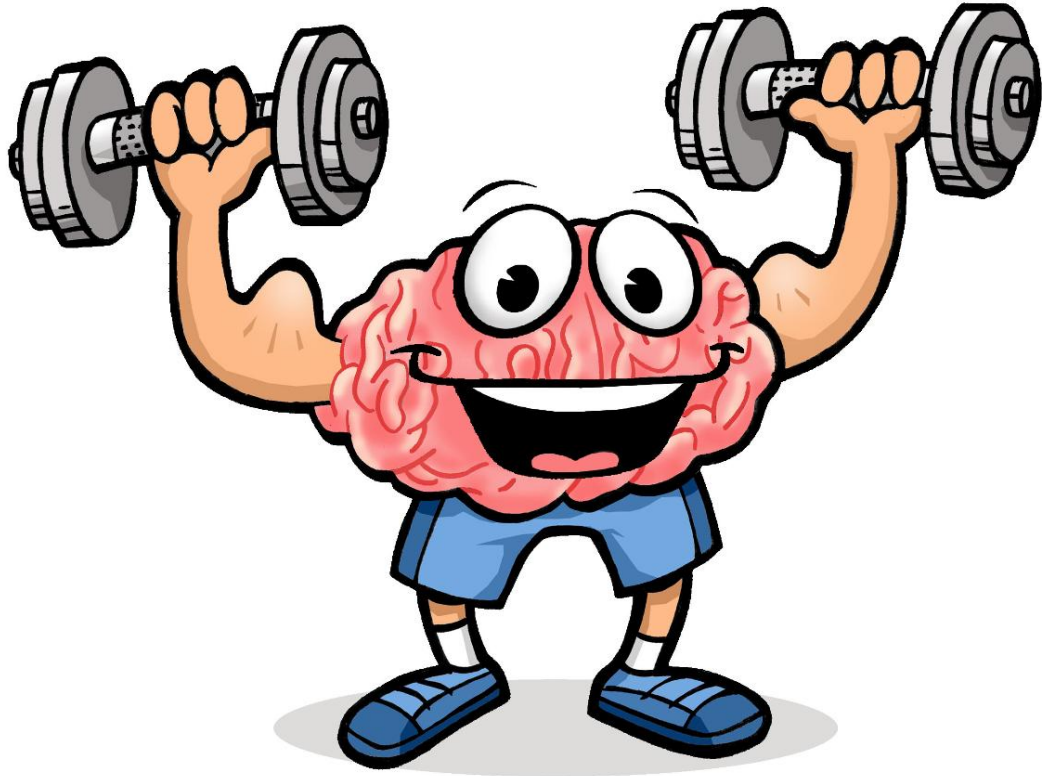
FIVE KINDS OF **EXERCISE**

- 1



FIVE KINDS OF **EXERCISE**

- AEROBIC
- ANAEROBIC
- ISOMETRIC
- ISOTONIC
- ISOKINETIC



AEROBIC EXERCISES

- Aerobic (or cardiovascular exercise, a term attributed to this kind of exercise because of its various benefits in cardiovascular health) refers to exercise that involves or improves oxygen consumption by the body.⁴ Aerobic means "with oxygen", and refers to the use of oxygen in the body's metabolic or energy-generating process.⁵ Many types of exercise are aerobic, and by definition are performed at moderate levels of intensity for extended periods of time. This intensity can vary from 50-80% of maximum heart rate.
 - Running
 - Swimming
 - Biking

ANAEROBIC EXERCISES

- Anaerobic exercise is the type of exercise that enhances power and builds muscle mass. Muscles trained under anaerobic conditions develop differently, leading to greater performance in short duration, high intensity activities, which last up to about 2 minutes.⁶

The most common form of anaerobic exercise is strength exercise. Strength exercise is the use of resistance to muscular contraction to build the strength, anaerobic endurance and size of skeletal muscles. There are many different methods of strength training, the most common of which are weight and resistance exercise. These two types of exercise use gravity (through weight stacks, plates or dumbbells) or machines to oppose muscle contraction, and the terms can be used interchangeably.

- Weight lifting
- Sprinting
- Jumping

AEROBIC vs ANAEROBIC

- Frequent and regular aerobic exercise has been shown to help prevent or treat serious and life-threatening chronic conditions such as high blood pressure, obesity, heart disease, Type 2 diabetes, insomnia, and depression. Strength training appears to have continuous energy-burning effects that persist for about 24 hours after the training, though they do not offer the same cardiovascular benefits of aerobic exercises. Both aerobic and anaerobic exercise also work to increase the mechanical efficiency of the heart by increasing cardiac volume (aerobic exercise), or myocardial thickness (strength training).
- When generalized fitness is a professional operational requirement, as for athletes, combat services, police and fire personnel, aerobic exercise alone may not provide a well-balanced exercise program. In particular, muscular strength, especially upper-body muscular strength, is usually neglected. Also, the metabolic pathways involved in anaerobic metabolism (glycolysis and lactic acid fermentation) that generate energy during high intensity, low duration tasks such as sprinting, are not exercised at peak rates. Aerobic exercise is, however, an extremely valuable component of a balanced exercise program and is good for cardiovascular health.
- Aerobics notably does not increase the basal metabolic rate as much as some forms of weight-training, and may therefore be less effective at reducing obesity. However, this form of exercise also allows for longer, more frequent activity and consumes more energy when the individual is active. In addition, the metabolic activity of an individual is heightened for several hours following a bout of aerobic activity.

ISOMETRIC EXERCISES

- **Isometric exercise** or isometrics are a type of strength training in which the joint angle and muscle length do not change during contraction (compared to concentric or eccentric contractions, called dynamic/isotonic movements).
 - Wall sits
 - Plank holds
 - Overhead holds
 - Glute bridge

ISOTONIC EXERCISES

- **Isotonic exercise:** [Exercise](#) when a contracting muscle shortens against a constant load, as when lifting a weight. Isotonic exercise is one method of muscular exercise. In contrast, isometric exercise is when muscular contractions occur without movement of the involved parts of the body.
- Isotonic comes from the Greek "iso-", equal + "tonos", tone = maintaining equal (muscle) tone. The muscle maintains equal tone while shortening in isotonic exercise.
 - Dumbbell press
 - Barbell press
 - Leg extension

ISOKINETIC EXERCISES

- Isokinetic exercise is far more specific than most other types of exercise. It allows specific control of resistance and, therefore, has much less potential for causing an injury. Isokinetic exercise is most commonly used in physical therapy, but it is gradually being used more by the general public or in physical therapy. Most isokinetic exercises use only bodyweight or very light weights.
 - Walking at a brisk pace
 - Slow Squats

HOMework

- Design your own **nutritional** meal plan for a week. Be sure to list every day of the week and include at least 5 meals a day, and when you plan to have them.
- Design an **exercise** plan for a week. Please include the five types of exercises in your plan!
- Homework is due at the beginning of class on **Wednesday, August 31st, 2016.**